

## DISASSEMBLY

### NOTICE:

When using a vise, do not overtighten it.

#### 1. MEASURE PS VANE PUMP ROTATION TORQUE

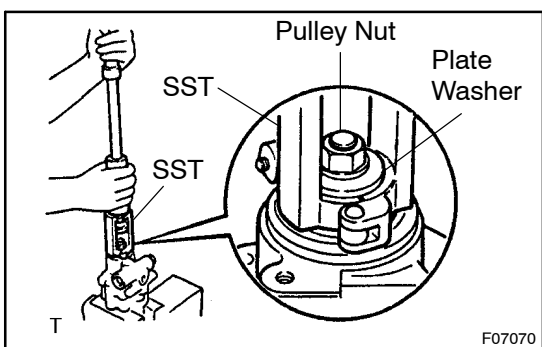
- (a) Check that the pump rotates smoothly without abnormal noise.
- (b) Temporarily install the vane pump pulley set nut.
- (c) Using a torque wrench, check the pump rotating torque.

#### Rotating torque:

**0.25 N·m (2.5 kgf·cm, 2.2 in.·lbf) or less**

#### 2. REMOVE OIL RESERVOIR AND OIL RESERVOIR CAP

- (a) Remove the 3 bolts and oil reservoir.
- (b) Remove the O-ring from the oil reservoir.

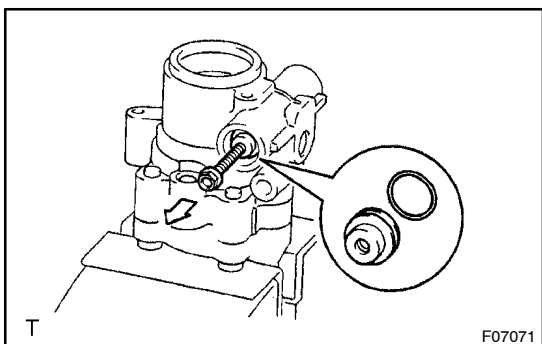


#### 3. REMOVE VANE PUMP SHAFT WITH BEARING

- (a) Using snap ring pliers, remove the snap ring from the front housing.
- (b) Temporarily install a appropriate plate washer and the pulley set nut to the vane pump shaft.
- (c) Using SST, pull out the vane pump shaft with the bearing. SST 09910-00015 (09911-00011, 09912-00010)

#### 4. REMOVE PRESSURE PORT UNION, FLOW CONTROL VALVE AND SPRING

- (a) Remove the pressure port union, flow control valve and spring.
- (b) Remove the O-ring from the pressure port union.



#### 5. REMOVE FLOW CONTROL SPRING SEAT

- (a) Using snap ring pliers, remove the snap ring from the front housing.
- (b) Temporarily install a bolt to the flow control spring seat and pull it out together with the flow control spring seat.

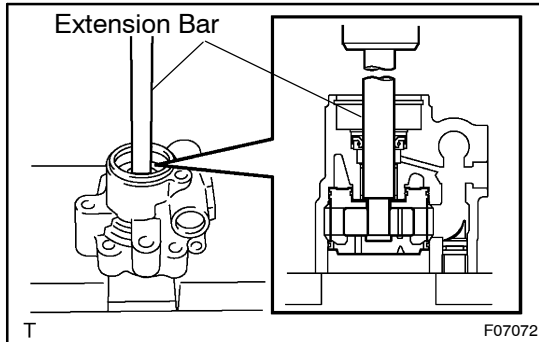
#### HINT:

Use a bolt with diameter 6 mm (0.24 in.) and pitch 1.0 mm (0.039 in.).

- (c) Remove the O-ring from the flow control spring seat.

**6. REMOVE REAR PUMP BRACKET**

- (a) Remove the 4 bolts and rear pump bracket.
- (b) Remove the O-ring from the rear pump bracket.

**7. REMOVE WAVE WASHER****8. REMOVE SIDE FRONT PLATE, CAM RING, VANE PUMP ROTOR, 10 VANE PLATES, SIDE REAR PLATE, SHORTER AND LONGER STRAIGHT PINS**

- (a) Using an extension bar, press out the side front plate, cam ring, vane pump rotor, 10 vane plates and side rear plate as an assembly.
- (b) Remove the O-ring from the side rear plate.
- (c) Remove the cam ring, vane pump rotor and the 10 vane plates.

**NOTICE:**

**Take care not to drop the vane plate.**

- (d) Remove the shorter straight pin from the side front plate.
- (e) Remove the 2 O-rings from the side front plate.
- (f) Using pliers, remove the longer straight pin from the front housing.